

Meeting Summary

US 29 Central Corridor Advisory Committee Meeting #12

Thursday, July 13, 2017, 6:30pm – 8:30pm
Silver Spring United Methodist Church, Forum Room
33 University Boulevard E., Silver Spring MD 20901

Participants

CAC Members (X for in attendance, blank for regrets)			
Louis Boezi	X	Brian Morrissey	X
Marie-Michelle Bunch		Michael Pfetsch	X
Karen Evans		Ken Jones (attended N)	
Joseph Fox (represented by Sanjida Rangwala)	X	Michele Riley	X
Sean Gabaree	X	Eugene Stohlman	
Melissa Goemann	X	James Williamson	X
Larry Goldberg	X	Teddy Wu	
Kevin Harris	X	James Zepp (attended N)	
Jeffrey McNeil		Clifford Zinnes (attended S)	
Karen Michaels	X	Matthew Koch (US 29 N member)	X

Staff

Darcy Buckley, MCDOT
Joana Conklin, MCDOT
Rafael Olarte, MCDOT
Anne Root, MCDOT
Sogand Seirafi, MCDOT
Rick Kiegel, RK&K
Brittney Rolf, RK&K
Michael Weinberger, Foursquare ITP
Josh Diamond, Foursquare ITP
Rebecca Martin, Foursquare ITP
Jim Bunch, Sabra Wang
Mike Kinney, Sabra Wang

Members of the Public

Tino Calabia
Julio Ceran, Office of Councilman Hucker
John Collins, Burnt Mills Citizens Assoc.
Jerry Garson, MD 355 South CAC Member
John Halper, SBCA
Harriet Quinn

1. Welcome

The meeting commenced at 6:30pm.

Michael Weinberger, meeting facilitator from Foursquare ITP, welcomed the CAC members and thanked them for attending the meeting. He began the meeting by reminding members of their role in the process as an advisory body, and that meeting agendas are set per the project scope. He reminded members that the success of the CAC process depends on mutual respect between the members, representatives of County government, and consultants. He encouraged members to contact him or County staff with any questions or concerns. The packet for CAC members includes contact information for project team members.

2. Transit Signal Priority

a. Introduction

Jim Bunch introduced himself and Mike Kinney, both from Sabra Wang. Jim explained his experience working on Transit Signal Priority (TSP) in Montgomery County since the 1990s.

b. What is Transit Signal Priority?

Transit signal priority (TSP) is an operational strategy that facilitates the movement of transit vehicles through signal-controlled intersections. Under certain conditions, a green signal can be extended or a red signal can be shortened to allow transit vehicles to proceed faster through the light.

The use of TSP at intersections along US 29 is *conditional*, meaning that it only occurs if certain conditions are met. Considerations include minimum green times, pedestrian walk times, each transit vehicle's on-time performance, and distance between transit vehicles. For example, TSP cannot override a minimum green time needed for pedestrians to cross an intersection. This time is calculated at a reduced walk time of 3.5 feet per second. The conditional TSP system is a modern system with reduced adverse effects on cross traffic in comparison to older TSP systems. Conditional TSP does not include signal preemption.

Jim asked for input from the CAC members about any additional selection criteria they feel is important in determining which intersection will have TSP. How should selection criteria be ranked?

Transit vehicles are tracked by Global Positioning Satellite (GPS) technology. The priority request generator requests priority to the priority request server, which uses an algorithm to decide whether the bus will receive priority and sends the result to the signal controller at the

intersection. If the bus receives priority, the traffic signal either remains green for longer or shortens a red light in accordance with the instructions from the priority request server. If the bus does not receive priority, the traffic signal continues as it would otherwise, with no change to the signal.

Jim explained the difference between schedule management and headway management. Schedule management is usually used at midday and in the late evening, when vehicles come less frequently. Under this scenario, buses are given signal priority if they are, for example, more than five minutes behind schedule. Headway management is used during rush hours, when buses are more frequent. Under this scenario, buses are given signal priority if the gap between them and the previous bus is 1.5 times what it should be or higher.

Jim showed a brief animation illustrating how TSP works.

Member Question (Q): When does the system shorten a green or extend a red? How will this affect traffic at the intersection of University Boulevard and US 29?

Answer (A): Early TSP systems used unconditional priority, which had significant traffic impacts on cross streets. Conditional TSP systems provide priority far less often, and when priority occurs, it lasts for a maximum of 10-15 seconds. If a particular intersection experiences significant negative outcomes, TSP can be deactivated at that intersection.

Member Comment (C): A member commented that it seems that TSP will make traffic worse, when we're trying to make it better.

A: TSP uses weighting factors to ensure that TSP is acceptable during given time periods. It is unlikely that University Boulevard and US 29 would be at the top of the list of candidates for TSP.

Q: There are nine lanes of traffic there. Will TSP disrupt pedestrian crosswalk times?

A: No, there is still a minimum walk time for pedestrians built into the signal times. TSP cannot change these.

Jim explained that TSP can be moved from one intersection to another if needed. Criteria for TSP includes whether an intersection has flexible time available in the cycle, bus stop location, and approach speed.

Q: It seems that the system has been created to prioritize BRT. Why not use TSP at a place like University Boulevard, where BRT priority is needed?

A: It is a balancing act to get the right combination of priority for BRT with minimal disruption to other traffic.

c. Existing Signal Operations

Mike Kinney (former MCDOT employee in the Transportation Management Center) explained how existing traffic signals in Montgomery County are managed. MCDOT maintains all 850 signalized intersections in the county, even though roughly 65 percent of the signals are owned by the Maryland State Highway Administration. In 2013, the County upgraded its signal systems to a modern distributed system, replacing a system that had been installed in 1979. As part of that project, the County installed a high-speed communications network allowing signals to communicate with each other and the transportation management center.

C: A member commented that he is excited about BRT and prioritizing bus traffic over other traffic.

C: Other members commented that they do not want traffic to be disturbed.

Michael clarified that implementing TSP means balancing on-time performance for the BRT with traffic congestion concerns.

TSP was first deployed to Ride On buses in the 1990s. This was a much older system and did not have a great impact. After the signal system modernization, the County performed a TSP pilot program in 2013 at three signals with five buses equipped with the technology, which was much more successful. This form of TSP will be incorporated into the Ride On Extra service debuting on MD 355 in October. The installation of TSP needs to not only account for the needs of buses and cars, but of all road users, including pedestrians.

Q: Has the County been running TSP for 20 years?

A: No. TSP began in the 90s before the signal system was upgraded. Originally, TSP was not very helpful and it was discontinued. The County began using TSP again in a 2013 pilot program with an upgraded system.

Q: Since the County has several years of experience with TSP, can you tell us about the challenges with TSP? What has the County learned to do differently?

A: In the past, the communication system did not work well. With the upgraded system, the communication is much better. The early system used infrared technology, which created problems. Now, the system uses GPS for more accurate and reliable signals.

Q: Who will maintain the TSP system?

A: MCDOT's traffic signal department has 19 technicians who repair signals and hardware. There is very little equipment to upkeep.

There is very little risk involved in TSP in terms of traffic signal operation. The bus driver does not have control of the TSP requests, and bystanders cannot tell that anything out of the ordinary has occurred when TSP is activated. Usually, there is only a few seconds of change in the light.

Q: Is it better to have traffic detectors instead of TSP?

A: There are already thousands of vehicle detectors in Montgomery County, although not all are working.

Q: Why aren't all the detectors working, if there are 19 staff to fix it?

A: The prohibitive cost is not the technician's time; it is replacing damaged pieces of the detectors. Wires are frequently damaged, sometimes by utility companies as they conduct maintenance work. The State now uses video detection instead of weight detectors. The budget does not allow enough funds to replace all the damaged pieces, so the department is behind in fixing the detectors. If you notice a detector that is not working, report it by calling 311 or using the County 311 website.

Q: Does the County agree or disagree with the State's findings that only two intersections were appropriate for TSP?

A: The State's study was for 2040, assumed unconditional TSP, and assumed a different roadway configuration. We are currently examining the conditions in 2020, with conditional TSP and full-day operation. We are in a different situation, so our findings are different.

Q: There are 31 intersections along the corridor. Will there be time savings if we have TSP at only 15 of them? Can we use TSP at fewer intersections and still save time for the buses?

A: There is precedence for operating TSP on US 29. Although the State owns the signals, the County operates and monitors them. Every signal that has TSP will potentially save the BRT vehicles several seconds in run time, helping them to maintain scheduled operations.

Q: Under your simulations, how many minutes (or what percentage of travel time) were saved due to TSP?

A: In our work on travel time, the team assumed average speed as an input, but this is based on multiple factors. Our study indicates a 22 to 35 percent time savings for the BRT over local bus, but this is not all due to TSP. A portion is also due to off-board fare collection, for example.

Q: What is the backlog on repairs for traffic signals?

A: Although this is not part of the BRT project, Mike can look for this information.

d. Intersection Selection Criteria

Jim displayed the two-step process that MCDOT uses to determine where TSP should be placed. The first step is to determine whether TSP is acceptable at an intersection. TSP is acceptable at an intersection if the intersection's volume/capacity ratio is below one, and if its slack time—the cycle time, minus all minimum pedestrian clearance and minimum left turn green times—is more than five seconds. The second step is to rank acceptable intersections based on a variety of criteria. Jim asked whether any members of the CAC would like to add criteria.

Considerations for TSP include the number of acceptable time periods; the type of cross street (a smaller, less busy road is generally better); whether there are other bus priority treatments at the intersection; where the bus stop is located relative to the intersection; the speed at which the bus approaches the intersection; and the ridership and frequency of parallel bus lines (if both ridership and frequency are higher, the intersection is better suited to TSP).

Jim asked members to consider which selection criteria are most important to them, and which they would like to add.

3. Environmental Review Process

Erron Ramsey from RK&K introduced the National Environmental Policy Act (NEPA). It requires all projects that receive funding from a federal agency to go through an environmental impact analysis process. Because this project is funded in part by TIGER grant money from the Federal Transit Administration (FTA), this project must comply with NEPA requirements.

Erron explained the three levels of environmental review under NEPA. A *Categorical Exclusion* is the level involving the least analysis, and is often used when the environmental impact of a project is expected to be insignificant. An *Environmental Assessment* (EA) determines whether there are significant environmental impacts. There are two potential outcomes from an EA: there is either a Finding of No Significant Impact (FONSI) or the activation of the requirement to complete an *Environmental Impact Statement* (EIS). An EIS is the most involved analysis of the environmental impacts of a project.

Because the environmental impacts of the US 29 BRT project are anticipated to be insignificant, the project qualifies for a "D-List" Categorical Exclusion (CE). To prepare the Categorical Exclusion (CE), RK&K is in the process of completing a CE Worksheet, which documents all the environmental resources, including social impacts, environmental impacts, right of way impacts, street trees, wetlands, water, physical impacts like noise and vibration, safety and security, and traffic impacts. The worksheet also includes the purpose and need of the project,

activities involved in the project, and description of the public engagement process. The team uses GIS and digital mapping tools in addition to field visits to prepare documentation to support conclusions.

The CE Worksheet is currently being reviewed by the FTA. MCDOT and FTA have already completed two rounds of review and a field tour and are working on additional edits to the worksheet based on the field tour. The worksheet could be approved as soon as the end of the month. At that point, the NEPA process is completed unless there is a change in the scope of work or the alternatives. Although the CE is not required to be released to the public, FTA and the County have agreed that the document will be released once FTA has made its finding.

Erron used Google Earth to show the proposed station placements and the relevant Study Areas. [During this meeting we referred to the Study Area as the Limits of Disturbance (LOD). However, in subsequent conversations with FTA, the Project Team was instructed to refer to it as the Study Area. The LOD is much smaller than the Study Area. The language has been updated in the summary to reflect this.] Within the Study Area, station platforms, amenities, and all other relevant improvements will take place. She showed an overlay of historic properties to demonstrate how that is considered in the station siting process. She showed that all construction will take place within existing right-of-way, and explained that Maryland state law requires that any street trees eliminated in State right-of-way as part of the project be replaced, one-for-one. [Trees in County right-of-way will be replaced three-for-one per County regulations.]

She displayed the Four Corners station on Google Earth. The Study Area, defined in yellow, is larger than the station itself; this is to cover potential and future design, and includes space for sidewalks and stormwater management. After the meeting, the team will provide maps of each station area to members by email and USPS.

Q: Are these station locations final?

A: The team is getting close to finalizing the exact locations of the station platforms. Based on the input received from CACs members, the team is not pursuing a median station at this location. Any location south of University Boulevard is too close to the ramps, so the team is proposing keeping the Four Corners station as far north as possible without being in the residential areas.

C: Sean Emerson's plan involves a different station location.

A: We are moving ahead with our plan as is.

Q: Has it been decided that platforms will be 14 inches higher than the sidewalk?

A: No, platforms will be 10-12 inches high total from the street grade (4-6 inches higher than a typical sidewalk).

Q: Will local buses be able to use BRT platforms?

A: Local buses may be physically able to use the platform. However, we do not anticipate that they will use them (this is more of a policy decision); local bus stops will be adjacent to BRT stations.

Michael pointed out that a future meeting will cover local bus service planning, and we can have a more in-depth conversation about local buses at that meeting.

C: A member expressed concern about the Council's interest in Mr. Emerson's proposal.

A: It is possible to provide input to the Council that some CAC members don't like Sean's proposal. All station elements besides the platform itself could be moved to a new location if the County were to decide to build a median station at this location as part of a different project.

Q: How did the team make the decision not to consolidate bus stops with local buses?

A: Physically, stations may be designed to accommodate local buses. However, this is a policy decision that has not been made yet. This will be discussed as we work to integrate local bus service planning.

Q: What will handicap access look like?

A: All BRT buses and stations will be ADA-accessible. The sidewalk will have a ramp, and boarding will be level. Wheelchairs will be able to roll onto the BRT. The sidewalk ramp will be 6 inches high and 5-10 feet long.

Q: Why hasn't the County released the environmental study?

A: We have submitted the checklist to the FTA for review. We just completed the site visit yesterday. Once we have approval from the FTA, the document will be released.

C: It doesn't make sense to ask for an exclusion without getting input from the public.

A: If an environmental impact study were required, then public input would be required. In this project's case, the environmental impact of the project has been determined to be insignificant, thus the Categorical Exclusion classification. But even drafts must be approved for release by the FTA.

C: Release is not the same as approval.

A: The CE is not a draft document. Since the team is asking FTA for a Categorical Exclusion, there is no draft document per se. The exclusion is the finding that the FTA makes, and it uses the Worksheet to inform the finding decision. If members are concerned about specific environmental impacts, the County can provide analysis or take feedback.

Q: The NEPA documentation is based on current plans for locations of stops. If they gave the County money based on this plan, how could the County Council change the plan to having the station be in the median? Wouldn't this violate the terms of agreement?

A: Yes, the County would need to check with the FTA if stations need to be moved in the future. The document is for this project only, and if a follow-up project uses federal funding, it will need its own environmental document. If there is a change in the design in the future, the FTA will reevaluate the project with the design change.

C: We have a master plan for BRT systems, and it is important to consider how BRT systems interact with each other. For example, there will likely be two BRT systems running through the intersection at University Boulevard.

A: From a transfer perspective, it is better to be closer to University Boulevard. However, the intersection has limited space available.

4. Bicycle and Pedestrian Accommodations

Anne Root, Bikeshare Director for MCDOT, presented the potential for Capital Bikeshare to complement this project. The bikeshare system debuted in Montgomery County in 2013. System-wide, it now has 32,000 members and users have made 16,000,000 total trips to date. Capital Bikeshare stations are located or clustered in five areas within the County: Silver Spring/Takoma Park, including two at Silver Spring Transit Center; Bethesda/Friendship Heights; Rockville/Shady Grove/Life Sciences Center, including King Farm; Chevy Chase Lake; and Wheaton. The County has long-term plans to connect these into a more continuous and consistent network.

In the DC metro area, Capital Bikeshare provides short point-to-point trips, averaging 30 or fewer minutes. Bikeshare in Montgomery County is used to complement existing bus and Metrorail service, with all services connecting to high-quality bus or Metrorail services. In addition to the regular subscription payment option, Capital Bikeshare is now offering a new \$2.00 single ride payment option, to provide an identically-priced alternative to Metrobus. This has been well received.

Bikeshare is typically used to access transit and to commute to work. People who use bikeshare tend to use automobiles less, both private cars and taxis/ride-sharing services. Businesses

appreciate bikeshare because people are more likely to visit businesses that are bikeshare-accessible.

Q: Are there any plans to connect sectors together?

A: Yes, that is the long-term plan. However, the beltway creates a challenge.

Q: What is the long-term goal for bikeshare in the county?

A: The long-term goal is to connect all corridors in the county. That would include Sligo Creek Trail to the south, east, and west. Currently, the sections do not connect.

The stations are modular (like Legos) and solar-powered. They consist of docks where bikes are held; the kiosk; and the bikes. Stations usually have 15 to 19 docks; generally, the goal is to have half of the docks filled with bikes at any given time.

Q: Are you assuming that riders buy an annual membership?

A: There are many different membership plans. Riders can choose single trip fares, monthly fares, or yearly fares.

Q: Will stations be located near residential areas?

A: We try to place stations close to town centers and apartment buildings where ridership will be high. Typically, stations are not located in strictly residential areas.

Road safety is a key factor when deciding where to place stations. Station placements are also dependent on sunlight; because they are solar-powered, the stations need at least four hours of direct sunlight a day. They need to be visible and easily accessible, and they cannot block sightlines for drivers or pedestrians. Placement near transit or other activity centers is preferred. Stations are generally a mile and a half apart in Montgomery County, which is higher than the industry standard of about 0.2 miles between stations, or between 28 and 36 stations per square mile. Reaching that industry standard is a long-term goal for Montgomery County.

Q: What will happen if the station does not receive four hours of sunlight each day?

A: If the station runs out of power, riders would not be able to unlock bicycles or purchase memberships. It is also possible to change batteries frequently at stations, but that is not preferred.

Q: If you pick up a [Capital Bikeshare] bike at the Metrorail station, where do you take it to and where can you park it?

A: The idea is that you need to have a station at both ends of your trip, so that when you reach your destination you park the bike at a nearby bikeshare station.

The TIGER grant includes funding for 10 bikeshare stations, and the County plans to seek out funding for six additional stations. The precise locations are not set, but the County plans to place stations close to BRT stations. However, not all the bikeshare stations can be on the BRT line because the bikeshare stations also need to act as feeder stations. The plan is to have clusters of bikeshare stations. Potential locations include Fairland, Lockwood, and Burtonsville. CAC members can provide input about potential locations.

Q: Must riders wear helmets?

A: In Montgomery County, riders under age 18 must wear a helmet. It is not required for older riders. Riders who purchase a year membership receive a discount on a helmet.

Q: It is awkward to carry around a helmet. Have you considered a Helmet-share program?

A: Some systems have tried this, but it hasn't been popular. Helmets must be sanitized overnight.

C: The bike master plan in Montgomery County calls for a bike lane on US 29 northbound. It is up for determination in the fall.

A: The Bikeways Master Plan is currently accepting input. It is not yet finalized, but may be in the fall.

Q: Where would the bike lane be?

A: This isn't part of our BRT project, so we cannot explain the specifics. However, before the decision is made to place a Capital Bikeshare station, the team will examine the ability of an average rider to access the BRT station.

Q: Does the BRT budget include \$2 million for bicycle and pedestrian improvements?

A: The budget includes \$2 million for bicycle and pedestrian improvements. This is not solely for Bikeshare stations, but will also include bicycle hooks on BRT vehicles and sidewalk improvements among other investments.

C: A member commented that it is very dangerous to ride a bicycle on the road, and may be safer to ride on the sidewalk. It is dangerous to cross intersections at beltway ramps, and would be beneficial to add stop buttons to allow for safer crossings. In addition, it is unclear to where riders can ride the bicycle.

Multiple members agree with this sentiment. Some sidewalks are too narrow for bicycles.

C: Pedestrian improvements are needed near the Blair High School station.

A: Rick clarified that the intersections along US 29 will be the hub of activity, and pedestrians will continue to residential areas.

C: A member commented that the NEPA documentation should be more than a Categorical Exclusion and should include an alternatives analysis.

A: The process qualifies for a categorical exclusion given the minimal level of environmental impacts. Joana will provide contact information for her contact at the FTA.

5. Next Steps

Michael announced that the next CAC meeting will be held the week of September 11.

C: A member commented that he feels that the meetings are unnecessarily contentious and that Michael limits conversation. He would like to receive materials in advance of the meetings, and would like more time in meetings to ask questions of the experts who are presenting.

A: Michael apologized if members feel as if they are not being listened to. The project team welcomes feedback from CAC members and takes this feedback into account in the design of the project. In the past, the team has sent out technical information that was misconstrued. It is difficult to digest technical information when experts are not present to explain what it means. The intention is not in any way to silence members. The fall schedule will include time to discuss TSP and service planning in more detail. The transit existing conditions report will be available in advance of these meetings.

C: A member believes there is too much on the agenda and not enough time for questions. A member would like a third of each meeting to be devoted towards questions.

A: That is a reasonable request and will be considered for future meetings.

C: A member expressed concern about the evaluation of environmental impacts and a lack of information about the impacts. This member would also like a presentation about potential bike lanes on US 29.

A: Michael noted that CAC agenda does not end in two meetings, it is only the end of this phase. CAC meetings will continue. There will be time to cover additional topics of interest to CAC members. However, the US 29 BRT project does not include the construction of bike lanes. In addition, each meeting progresses differently, based on the interests of the people in the room.

C: A member expressed concern about traffic congestion along the corridor. The member is concerned that buses stopping at stations will slow down traffic.

A: The BRT will have minimal stopping time, so it will not add significant impact. If the traffic is already moving very slowly, this will be less of an issue. In addition, the BRT will add eight buses each hour to a corridor that has tens of thousands of vehicles on it.

The meeting adjourned at 8:50pm.